

## Human Box Plot Activity

Imagine you and your classmates are stranded on a deserted island. The US Coast Guard is searching for all four of Mr. Tompson's Algebra classes via airplane. The only way you will be spotted and rescued is by correctly constructing a human box plot using your birthday month data. Once built, you must have one classmate radio Mr. Tompson to correctly describe your classes birthday box plot to get rescued. Only then will the Coast Guard send a rescue ship, which will be waiting with food, candy, or refreshments. The class that gets rescued first will have the first choice of food, candy or refreshments. Follow the directions below to devise a plan to be rescued.

You will first have a discussion as a class to devise a plan to construct a human box plot and be rescued. The following roles are suggested for the discussion and activity.

**Note Taker** (2 People)- Two students to take notes during the discussion to review key points at the end of the discussion. One or both of the note takers can summarize the notes to report back to classmates near the end of the discussion.

**Disk Jockey** (2 People) - Two students will be responsible for radioing the description of the box plot to the Coast Guard. The two students can collaborate to ensure they correctly describe the box plot.

**Calculator** (2 People) - Two students to assume the role of making sure that all peers are in the correct positions with the proper labels before the disk jockey goes on the radio.

**Facilitator** (1 Person)- A student responsible for facilitating a respectable discussion to prep for creating the box plot. The facilitator also ensures that their classmates are on task during the human box plot activity.

**Classmates (All members of the class)** - All class members are required to participate with a respectful attitude to complete the activity.

The following resources will be provided-

- Rope
- Two meter sticks, one broom
- The following labeling: **Minimum, Maximum, 1<sup>st</sup> Quartile, 3<sup>rd</sup> Quartile, Median**
- "Radio"

You will have six minutes to discuss and create a plan to create a human box plot to be rescued. Once the discussion is over, we will head outside with your resources, and you will be timed to see how long it takes for you to create the box plot. The disk jockey's will be required to answer the following questions when they contact the Coast Guard via radio.

1. Who has the median birthday?
2. Who has the minimum birthday?
3. Who has the maximum birthday?
4. Who has the 1<sup>st</sup> quartile birthday?
5. Who has the 3<sup>rd</sup> quartile birthday?
6. Whoever's first name is closest to A, do they fall above or below the first quartile?

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